

PATENT APPLN. NO. 10/786,593
RESPONSE UNDER 37 C.F.R. § 1.116

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IN THE CLAIMS:

1. (currently amended) A nonaqueous electrolyte secondary battery comprising a positive electrode and a negative electrode capable of occluding and releasing lithium and a nonaqueous electrolyte, wherein the negative electrode comprises a sintered product of a foamed metal containing silicon therein as an active material and ~~a heat resistant resin~~ polyimide as a heat resistant binder.

2. (original) The nonaqueous electrolyte secondary battery according to claim 1, wherein the foamed metal comprises copper or nickel.

3. (original) The nonaqueous electrolyte secondary battery according to claim 1, wherein the foamed metal containing silicon therein is prepared by impregnation or coating of a foamed metal with a slurry comprising silicon particles and a binder.

4. (original) The nonaqueous electrolyte secondary battery according to claim 2, wherein the foamed metal containing silicon

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therein is prepared by impregnation or coating of a foamed metal with a slurry comprising silicon particles and a binder.

5. (original) The nonaqueous electrolyte secondary battery according to claim 1, wherein the negative electrode comprises the foamed metal and a metal current collector, and the foamed metal is adjacent to a side or both sides of the metal current collector.

6. (original) The nonaqueous electrolyte secondary battery according to claim 2, wherein the negative electrode comprises the foamed metal and a metal current collector, and the foamed metal is adjacent to a side or both sides of the metal current collector.

7. (original) The nonaqueous electrolyte secondary battery according to claim 3, wherein the negative electrode comprises the foamed metal and a metal current collector, and the foamed metal is adjacent to a side or both sides of the metal current collector.

8. (original) The nonaqueous electrolyte secondary battery according to claim 4, wherein the negative electrode comprises the

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foamed metal and a metal current collector, and the foamed metal is adjacent to a side or both sides of the metal current collector.

9. (original) The nonaqueous electrolyte secondary battery according to claim 5, wherein the foamed metal and the metal current collector are secured together by welding or an adhesive agent, or are held adjacent to each other by structural pressure of the battery.

10. (original) The nonaqueous electrolyte secondary battery according to claim 6, wherein the foamed metal and the metal current collector are secured together by welding or an adhesive agent, or are held adjacent to each other by structural pressure of the battery.

11. (original) The nonaqueous electrolyte secondary battery according to claim 7, wherein the foamed metal and the metal current collector are secured together by welding or an adhesive agent, or are held adjacent to each other by structural pressure of the battery.

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12. (original) The nonaqueous electrolyte secondary battery according to claim 8, wherein the foamed metal and the metal current collector are secured together by welding or an adhesive agent, or are held adjacent to each other by structural pressure of the battery.

13. (canceled)

14. (previously presented) The nonaqueous electrolyte secondary battery according to claim 13, wherein the foamed metal containing the active material and the binder are sintered at a temperature in the range of 250 ~ 600°C.